## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dana Alexa Totir et al. Art Unit: 1745

Serial No.: 10/800,905 Examiner: Raymond Alejandro

Filed : March 15, 2004 Conf. No. : 1479

Title : NON-AOUEOUS ELECTROCHEMICAL CELLS

## MAIL STOP AF

Commissioner for Patents

P.O. Box 1450 Alexandria, VA 22313-1450

## REPLY TO ACTION OF OCTOBER 26, 2007

Applicants acknowledge that the previous rejections have been withdrawn in view of the Second Declaration of Dana Alexa Totir, Kirakodu S. Nanjundaswamy and Michael Pozin Under 37 C.F.R. § 1.131. That Declaration established that applicants had made electrochemical cells covered by the pending claims prior to September 12, 2003.

However, the Examiner now has made a series of 35 U.S.C. § 103(a) rejections of the pending claims based on Birke-Salam et al., 2003/0113637 ("Birke-Salam"). Birke-Salam has a publication date of June 19, 2003 and a filing date in the United States of December 3, 2002. The Third Declaration of Dana Alexa Totir, Kirakodu S. Nanjundaswamy and Michael Pozin Under 37 C.F.R. § 1.131 establishes that electrochemical cells covered by the pending claims were made and used by applicants in the United States (see paragraph 1) prior to December 3, 2002. The Third Declaration includes the same laboratory notebook pages (with dates whited out) relied on in the Second Declaration of Dana Alexa Totir, Kirakodu S. Nanjundaswamy and Michael Pozin Under 37 C.F.R. § 1.131. For the convenience of the Examiner, paragraph 3 of the Declaration is auoted below:

- The laboratory notebook pages demonstrate that electrochemical cells covered by claims 1-5, 8-12, 14-24, 28, 31-35, and 39-43, and 45-46 were made and used prior to September 12, 2003.
- (a) Some of the information on the notebook pages is highlighted for convenience. See in particular the highlighted information next to "Cell #1" on page 2489-111 and "Cell #2" on page 2489-111. The electrochemical cells were

Applicant: Dana Alexa Totir et al. Attorney's Docket No.: 08935-270001 / M-4996/Z-Serial No.: 10/800,905 03622

Serial No.: 10/800,905 Filed: March 15, 2004 Page: 2 of 4

coin cell models that included a plastic housing, a cathode including "β-EMD" (β-electrolytic manganese dioxide) on a "primed Al" (aluminum) current collector. The aluminum current collector in turn was pressed on an "SS grid". SS is stainless steel, and the aluminum current collector thus was in contact with a second metal surface (the stainless steel) different from the surface of the aluminum current collector. The cells included a "Li" (lithium) anode and an electrolyte including "0.05 M" (page 2489-110) or "0.03 M" (page 2489-111) LiBOB." LiBOB is lithium bis(oxalato)borate. Thus, the electrochemical cells described on laboratory notebook pages 2489-110 and 2489-111 include all of the requirements of claims 1-2, 5, 8-12, 31-35, and 45-46.

- (b) Laboratory notebook pages 2489-110 and 2489-111 refer to "LiBOB in TDE10" in the highlighted information next to "Cell #1" and "Cell #2". TDE10 is an internal name for an electrolyte that includes, among other ingredients, lithium trifluoromethanesulfonate. Thus, electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 also include all of the requirements of claims 3 and 4.
- (c) The aluminum cathode current collector used in the electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 had a size of at least one dimension greater than 2 millimeters. Thus, the electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 include all of the requirements of claims 14-16.
- (d) The electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 were designed to be discharged once and then discarded, and thus are primary electrochemical cells as opposed to secondary (rechargeable) electrochemical cells. Thus, the electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 meet all of the requirements of claims 17-24, 28, and 39-43.

Thus, Birke-Salam does not qualify as prior art to the pending claims under either 35 U.S.C. § 102(a) (based on the June 19, 2003 publication date) or 35 U.S.C. § 102(e) (based on the December 3, 2002 filing date).

Turning to the current rejection, claims 1-5, 8, 14-20, and 28 were rejected under 35 U.S.C. § 103(a) over Birke-Salam in view of Krause et al., U.S. Pat. 5,691,081 ("Krause"). Birke-Salam does not qualify as prior art to these claims for the reasons explained above, and the claims have not been rejected based on Krause alone. Thus, the 35 U.S.C. § 103(a) rejection of claims 1-5. 8, 14-20, and 28 based on Birke-Salam and Krause should be withdrawn.

Applicant: Dana Alexa Totir et al. Attorney's Docket No.: 08935-270001 / M-4996/Z-Serial No.: 10/800,905 03622

Filed : March 15, 2004 Page : 3 of 4

Claims 9-12, 21-24, and 31-35 have been rejected under 35 U.S.C. § 103(a) over Birke-Salam in view of Krause and further in view of Amine et al., 2005/0019670 ("Amine"). Birke-Salam does not qualify as prior art to these claims for the reasons explained above, and the claims have not been rejected based only on Krause and/or Amine. Thus, the 35 U.S.C. § 103(a) rejection of claims 9-12, 21-24, and 31-35 based on Birke-Salam, Krause, and Amine should be withdrawn.

Claims 9-12, 21-24, and 31-35 also have been rejected under 35 U.S.C. § 103(a) over Birke-Salam in view of Krause and further in view of Wietelmann et al., U.S. 6,506,516 ("Wietelmann"). Birke-Salam does not qualify as prior art to these claims for the reasons explained above, and the claims have not been rejected based only on Krause, Amine, and/or Wietelmann. Thus, the 35 U.S.C. § 103(a) rejection based on Birke-Salam, Krause, Amine, and Wietelmann should be withdrawn.

Claims 39-43, 45, and 46 have been rejected under 35 U.S.C. § 103(a) over Birke-Salam in view of Amine. Birke-Salam does not qualify as prior art to these claims for the reasons explained above, and the claims have not been rejected based on Amine alone. Thus, the 35 U.S.C. § 103(a) rejection of claims 39-43, 45, and 46 based on Birke-Salam and Amine should be withdrawn.

Claims 39-43, 45, and 46 also have been rejected under 35 U.S.C. § 103(a) over Birke-Salam in view of Wietelmann. Birke-Salam does not qualify as prior art to these claims for the reasons explained above, and the claims have not been rejected based on Wietelmann alone. Thus, the 35 U.S.C. § 103(a) rejection of claims 39-43, 45, and 46 should be withdrawn.

Applicants submit that the claims are in condition for allowance and such action is respectfully requested.

Please apply any other charges or credits to deposit account 06-1050.

Applicant: Dana Alexa Totir et al. Serial No.: 10/800,905

Filed : March 15, 2004 Page : 4 of 4 Attorney's Docket No.: 08935-270001 / M-4996/Z-

Respectfully submitted,

Date: March 20, 2008

/Robert C. Nabinger/ Robert C. Nabinger Reg. No. 33,431

Fish & Richardson P.C. 225 Franklin Street Boston, MA 02110 Telephone: (617) 542-5070 Facsimile: (617) 542-8906

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